

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (currently amended) A vortex inhibitor for molten metal pouring from a discharge nozzle comprising:

a uniform castable refractory body having a generally tapering shape along a longitudinal axis from a base toward a narrow end and a hollow chamber positioned longitudinally to the body extending within the body; and

~~an elongated sacrificial member constructed to dissolve before substantially obstructing the discharge nozzle and retained by the hollow chamber to form an integral body;~~

a means for orienting the refractory body in a narrow end downward position if the refractory body is misaligned, wherein the means for orienting is retained by the hollow chamber;

whereby the integral body combining the refractory body and the means for orienting sacrificial member has a specific gravity of ~~about 2.3 to about 7.0 less than the specific gravity of molten metal~~, and is self-orienting in a narrow end downward position when supported in molten metal.

2. (currently amended) The vortex inhibitor of claim 1 wherein the means for orienting is a sacrificial member protrusions extending outwardly from the sacrificial member mount in the hollow chamber to form an integral body.

3. (currently amended) The vortex inhibitor of claim [[1]] ~~2~~ wherein crimps extending outwardly from the sacrificial member mount in the hollow chamber to form an integral body.

4. (currently amended) The vortex inhibitor of claim [[1]] ~~2~~ wherein molten metal is disposed within the hollow chamber upon introduction into the metal receptacle.

5. (currently amended) The vortex inhibitor of claim [[1]] 2 wherein the sacrificial member is hollow.

6. (currently amended) The vortex inhibitor of claim [[1]] 2 wherein the sacrificial member is a solid bar.

7. (currently amended) The vortex inhibitor of claim [[1]] 2 wherein an exposed surface of the sacrificial member is coated with a refractory material ~~having a refractory coating thickness~~.

8. (currently amended) The vortex inhibitor of claim 7 wherein the sacrificial member has a refractory coating thickness [[is]] less than about 9 millimeters.

9. (currently amended) The vortex inhibitor of claim [[3]] 5 wherein the sacrificial member is filled with a refractory material.

10. (currently amended) The vortex inhibitor of claim [[1]] 2 wherein the body includes a complex polygonal base.

11. (currently amended) The vortex inhibitor of claim [[1]] 2 wherein the base is hexagonal.

12. (currently amended) The vortex inhibitor of claim [[1]] 2 wherein the base is octagonal.

13. (canceled)

14. (currently amended) A vortex inhibitor for molten metal pouring from a discharge nozzle comprising:

a uniform castable refractory body having a generally tapering shape along a longitudinal axis from a base toward a narrow end and a hollow chamber shaft positioned longitudinally to the body extending within the body; and

~~an elongated sacrificial member constructed to dissolve before substantially obstructing the discharge nozzle and retained by the shaft to form an integral body;~~

a means for aligning the refractory body in the metal pouring vessel during at least a portion of the metal pour without substantially obstructing the flow of molten metal through the discharge nozzle, wherein the means for aligning is retained by the hollow chamber;

whereby the integral body combining the refractory body and the means for aligning ~~sacrificial member~~ has a specific gravity ~~of about 2.3 to about 7.0 less than the specific gravity of molten metal~~, and is self-orienting in a narrow end downward position when supported in molten metal.

15. (currently amended) The vortex inhibitor of claim [[14]] 29 wherein the shaft is hollow.

16. (currently amended) The vortex inhibitor of claim [[14]] 29 wherein the shaft is solid.

17. (original) The vortex inhibitor of claim 15 wherein the sacrificial member contains external screw threads.

18. (original) The vortex inhibitor of claim 16 wherein the sacrificial member contains external screw threads.

19. (currently amended) The vortex inhibitor of claim 17 wherein an end of the shaft contains internal screw threads, wherein the external screw threads on the sacrificial member and internal screw threads are [[matable]] mateable.

20. (original) The vortex inhibitor of claim 15 wherein the sacrificial member contains internal screw threads and an end of the shaft contains internal screw threads.

21. (original) The vortex inhibitor of claim 20 further comprising a nipple with external screw threads at each end, wherein the nipple mates the sacrificial member with the shaft.

22. (original) The vortex inhibitor of claim 18 wherein an end of the shaft contains external screw threads.

23. (original) The vortex inhibitor of claim 22 having a coupling containing internal screw threads, wherein the coupling mates the sacrificial member with the shaft, whereby the body and the sacrificial member combination form an integral vortex inhibitor.

24. (currently amended) The vortex inhibitor of claim [[14]] 29 wherein the sacrificial member is hollow.

25. (original) The vortex inhibitor of claim 24 wherein the sacrificial member is positioned snugly over the shaft.

26. (canceled)

27. (canceled)

28. (new) The vortex inhibitor of claim 14 wherein the means for aligning is a sacrificial member.

29. (new) The vortex inhibitor of claim 28 wherein the uniform castable refractory body includes a shaft is positioned within the hollow chamber.

30. (new) A vortex inhibitor for molten metal pouring from a discharge nozzle comprising:

a uniform castable refractory body having a generally tapering shape along a longitudinal axis from a base toward a narrow end and a hollow chamber positioned longitudinally to the body extending within the body; and

a means for orienting the refractory body in a narrow end downward position without persisting in the discharge nozzle, wherein the means for orienting is retained by the hollow chamber;

whereby the integral body combining the refractory body and the means for orienting has a specific gravity less than the specific gravity of molten metal, and is self-orienting in a narrow end downward position when supported in molten metal.

31. (new) The vortex inhibitor of claim 30 wherein the molten metal is steel.